# STATE OF LOUISIANA

# DEPARTMENT OF ENVIRONMENTAL QUALITY

# OFFICE OF ENVIRONMENTAL COMPLIANCE

IN THE MATTER OF:

GEORGIA GULF CHEMICALS & VINYLS, L.L.C. IBERVILLE PARISH ALT ID NO. 1280-00002

ENFORCEMENT TRACKING NO.

MM-CN-01-0035

AGENCY INTEREST NO.

PROCEEDINGS UNDER THE LOUISIANA ENVIRONMENTAL QUALITY ACT, La. R.S. 30:2001, ET SEQ.

2455

# SETTLEMENT

The following Settlement is hereby agreed to between Georgia Gulf Chemicals & Vinyls, L.L.C. (Respondent) and the Louisiana Department of Environmental Quality, (Department), under authority granted by the Louisiana Environmental Quality Act, LSA- R.S. 30:2001, et seq., (the "Act").

I.

Respondent is Georgia Gulf Chemicals & Vinyls, L.L.C. and/or Georgia Gulf Corporation. At all times pertinent hereto, Respondent owned and/or operated a chemical plant located at 26100 La. Highway 405 in Plaquemine, Iberville Parish, Louisiana, which is permitted to operate under Permit Number 2224-V0 issued on September 21, 1999, Permit Number 881-V0 issued on September 2, 1998, and several other permits. Respondent is authorized to discharge certain quantities and qualities of treated process, utility, and sanitary wastewaters, and stormwater to the Mississippi River and to Bayou LaButte drainage system, all waters of the state, under the terms and

conditions of Louisiana Pollutant Discharge Elimination System (LPDES) permit LA0007129, effective February 1, 1999.

Π.

Respondent's PVC production facility is subject to the standards set forth in LAC 33:III.5116, which incorporates by reference the National Emission Standard for Vinyl Chloride established at 40 CFR 61. These standards establish the procedures by which vinyl chloride emissions from reactor opening loss in the PVC Plant reactors are measured and recorded. In late 1996, Respondent was made aware of potential irregularities in the implementation of written procedures regarding the reactor opening loss emission calculation process. According to Respondent, employees were thereafter retrained in the correct method for implementing the reactor opening loss emission calculation process.

Ш.

Respondent applied for a Title V Operating Permit in October of 1996. In that application, vinyl chloride emissions from reactor opening loss in the PVC Plant reactors were identified as Source ID No. 19-80 in the Emission Inventory Questionnaire. Source ID No. 19-80 was based on calculations prepared by Respondent and assigned an emission rate of 0.077 tons per year of vinyl chloride and total VOCs. Additionally, the application submitted by Respondent contained an Application for Approval of Emissions that listed a facility-wide permitted emission rate for vinyl chloride of 9.615 tons per year. On September 2, 1998, the Department issued Permit No. 881-V0 to Respondent.

In the course of conducting calculations necessary for the preparation and submittal of the LESHAP quarterly report for the period December 1, 1998, to February 28, 1999, Respondent discovered that the computer data was incorrectly calculated for reactor opening loss by dividing concentrations by the number of batches. Recalculation of the data utilizing the correct equation indicated that estimated emissions of vinyl chloride were in excess of the permitted emission rate of 0.077 tons per year for Source ID No. 19-80. The actual emissions as previously reported by Respondent to the Department were 0.58 tpy in 1999 and 0.41 tpy in 2000. Respondent has reported it has not exceeded the facility-wide permitted emissions rate of 9.615 tpy for vinyl chloride.

V.

Based on recognition of the fact that estimated emissions for Source ID No. 19-80 were in excess of the permitted emission rate for vinyl chloride of 0.077 tons per year, Respondent filed a permit modification request in December 1999 seeking reconciliation of Permit No. 881-V0 and seeking an increase in the permitted yearly emission rate for Source ID No. 19-80 to 0.738 tons per year and the facility-wide emission rate for vinyl chloride of 10.28 tons per year.

#### VI.

The application for modification of Permit No. 881-V0 was supplemented and amended on August 17, 2001, in the following respects:

A. Emission source limitations for vinyl chloride were adjusted and/or reallocated within the facility to accommodate actual emissions for Source ID Nos. 19-80 and 1-86 without requesting an increase in the overall facility emissions limit of 9.615 tpy for vinyl chloride.

- B. The original calculations for establishing the permit limitations for Source ID Nos. 22-80 and 25-80 were corrected to recognize that the dryers run in series rather than based upon an assumed split of the production stream between the dryers.
- C. The original calculations for establishing the permit limitations for Source ID Nos. 7-78, 8-78 and 1-89 were changed to recognize the actual allocation of production from these points thereby correcting an emission allocation discrepancy.
- D. The original calculations for establishing the permit limitations for Source ID Nos. 5-94 and 11-94 were changed to correct an emission allocation discrepancy.

Pursuant to Consolidated Compliance Order and Notice of Potential Penalty No. MM-CN-01-0035 on August 27, 2001, Respondent was authorized to operate in compliance with the permit limitations requested in the above referenced amended application for modification, as well as those portions of Permit No. 881(V-0) for which no modification had been requested.

#### VII.

Respondent was issued COMPLIANCE ORDER NO. WE-C-99-0014 on or about February 1, 1999, for violations of the Act; including the unauthorized discharge of inadequately treated wastewater from Respondent's facility and other violations and deficiencies of the requirements in LPDES permit LA0007129. This Compliance Order mandated the Respondent to implement a Compliance Schedule and to protect water quality by meeting certain wastewater discharge requirements. The Respondent did not appeal the Compliance Order; therefore, said action is final and effective, and not subject to further administrative review. COMPLIANCE ORDER NO. WE-C-99-0014 was subsequently amended by AMENDED COMPLIANCE ORDER NO. WE-C-99-0014A on or about February 28, 2000, and by AMENDED COMPLIANCE ORDER

NO. WE-C-99-0014B on or about March 22, 2001. The subsequent Amended Compliance Orders were not appealed and therefore are final and effective.

#### VIII.

Respondent undertook significant internal compliance evaluation at its Plant. As a part of this voluntary internal compliance evaluation, on or about February 15, 2000, Respondent met with the Department to disclose problems it had encountered with Metcalf & Eddy, Inc., with whom Respondent had contracted to handle its fugitive emissions program at the Plaquemine facility. The Department requested Respondent provide a report to the Enforcement Division listing and clarifying its compliance issues, corrective actions needed and a schedule with target completion dates for these corrective actions. Respondent submitted reports to the Department on February 22, 2000, and on March 23, 2000, and in connection with these reports, Respondent was issued COMPLIANCE ORDER NO. AE-C-00-0220 on or about November 2, 2000, which was subsequently amended by AMENDED COMPLIANCE ORDER NO. AE-C-00-0220A on or about May 3, 2001. Respondent completed all tasks set forth in the schedule contained in the Compliance Order, as amended, as set forth in its final report to the Department dated July 13, 2001, which was supplemented and amended by Respondent's Amendment to Final Report to the Department dated August 24, 2001.

IX.

-Further inspection and subsequent file review conducted by the Department on or about August 23, 2001, revealed the following alleged violations with regard to Respondent's facility:

A. In late 1996, Respondent became aware of improper emission monitoring used in the implementation of procedures regarding the reactor opening loss emission calculation process.

- This is a violation of LAC 33:III.5121.H.7.e as was in effect in 1996 and Sections 2057(A)(1) and 2057(A)(2) of the Act.
- B. In a letter dated July 11, 2001, Respondent reported that a recurrent reactor opening loss computer calculation error was discovered on March 12, 1999, and was corrected on March 16, 1999. Respondent also reported in the same letter that on June 15, 1999, a "double-division" error in the reactor opening loss calculations was discovered and that the error was corrected on June 29, 1999. These are violations of 40 CFR 61.67(g)(5)(i) which language has been adopted as a Louisiana regulation in LAC 33:III.5116 and Section 2057(A)(2) of the Act.
- C. In letters dated May 25, 2000 and July 3, 2001, and updated in a fax dated August 24, 2001, Respondent reported permit exceedances and unpermitted emissions that were discovered during review of calculations for EIS and TRI submittals. The permit exceedances and unpermitted emissions are associated with Permit Nos. 881(V-0), 2224(V-0), 2030(M-2), 2056(M-1), 2330, 1267T(M-5) and 881(M-2). Unpermitted emissions were also reported in the Shipping and Utilities/WW Units. Additionally, in 1995 Respondent notified LDEQ of previously unpermitted emission points (EIQ Id. Nos. 2-94 and 23-94) not covered in Permit No. 881(M-1). These emission points were, however, subsequently permitted in Permit No. 881(V-0). These and the other permit exceedances and unpermitted emissions are violations of LAC 33:III.501.C.2, LAC 33:III.501.C.4, LAC 33:III.507.B.2 and Sections 2057(A)(1) and 2057(A)(2) of the Act.
- D. Respondent reported exceedances of the reactor opening loss 0.02 g/Kg vinyl chloride standard on March 5, 1999; May 26, 1999; October 3, 1999; October 4, 1999; and September 6, 2000. These are violations of 40 CFR 61.64(a)(2) which language has been adopted as a Louisiana regulation in LAC 33:III.5116 and Sections 2057(A)(1) and 2057(A)(2) of the Act.

- E. Respondent's facility experienced a release of 36 pounds of vinyl chloride to the air on or about September 13, 1999. The incident occurred when the Reactor No. 11 lid was not properly secured. Therefore, the root cause of the incident was operator error. This is a violation of the Louisiana Air Quality Regulations, in particular LAC 33:III.905 which states "When facilities have been installed on a property, they shall be used and diligently maintained in proper working order whenever any emissions are being made which can be controlled by the facilities, even though the ambient air quality standards in affected areas are not exceeded." Control equipment as defined by LAC 33:III.111 is "any device or contrivance, operating procedure to abatement scheme used to prevent or reduce air pollution." This also constitutes a violation of Sections 2057(A)(1) and 2057(A)(2) of the Act.
- F. Records of visual emissions inspections for emission point nos. 1-78 thru 8-78, 22-80, 24-80, 25-80, 1-89, 4-89, 2-94, 31-73 thru 38-73, 17-80, 18-80, 7-89, 8-89 and 23-94 were not maintained for December 7, 2000. This is a violation of State Only Specific Condition Nos. 2 and 3 of Permit No. 881-V0, LAC 33:III.507.B.2 and Section 2057(A)(2) of the Act.
- G. In an addendum to a LESHAP Quarterly report dated October 4, 2000, Respondent reported that on June 16, 2000, a RVCM sample on the wastewater stripper in the PVC Unit was analyzed at 15.26 ppm, in excess of the 10 ppm VCM emission standard. This is a violation of 40 CFR 61.64(b) which language has been adopted as a Louisiana regulation in LAC 33:III.5116 and Sections 2057(A)(1) and 2057(A)(2) of the Act.
- H. In correspondence dated July 13, 2001, August 24, 2001, and October 19, 2001, Respondent reported approximately 9,200 components (mostly valves and connectors) that had not been monitored as required. This is a violation of 40 CFR 63, Subpart H National Emission

Standards for Organic Hazardous Air Pollutants for Equipment Leaks which language has been adopted as a Louisiana regulation in LAC 33:III. \$122, Louisiana Non-HON MACT as required by Compliance Plan No. 92049 approved on June 13, 1995, LAC 33:III.5109.A.1 and Sections 2057(A)(1) and 2057(A)(2) of the Act.

I. A file review conducted by the Department on or about August 24, 2001, revealed the following effluent limitation exceedances of LPDES permit LA0007129:

Month/Year	Parameter/Outfall	Sample Result	Permit Limit
December 2000	pH/005Q	9.2 SU	6.0-9.0 SU
November 2000	COD/302A	120 mg/L	100 mg/L
June 2000	COD/302A	108 mg/L	100 mg/L
December 1999	TRC/102A	39.4 lbs/day	34.4 lbs/day
December 1999	pH/007Q	5.7 SU	6.0-9.0 SU
May 1999	COD/302A	198 mg/L	100 mg/L

Respondent's Discharge Monitoring Reports for the third and fourth quarters of 2001indicate pH exceedances at certain stormwater outfalls that receive runoff from the landfarm. These permit effluent limitation exceedances are violations of LPDES permit LA0007129 (Parts I.A, and III.A.2), La. R.S. 30:2076(A)(1), La. R.S. 30:2076(A)(3), LAC 33:IX.501.A, LAC 33:IX.501.D, LAC 33:IX.2355.A and LAC 33:IX.2767.A.5.

X.

The allegations which form the basis of the enforcement action(s) are set forth in the Consolidated Compliance Order and Notice of Potential Penalty dated August 27, 2001, bearing the above captioned Enforcement Tracking No. MM-CN-01-0035 and Agency Interest No. 2455.

On September 26, 2001, Respondent timely filed with the Department a Protective Request for Hearing.

#### XII.

Respondent denies it committed any violations or that it is liable for any fines, forfeitures and/or penalties.

### XIII.

Nonetheless, the Respondent, without making any admission of liability under state or federal statute or regulation, agrees to undertake and make, and the Department agrees to accept, the Beneficial Environmental Projects (BEPs) and cash payment described in Paragraph XIV below and the additional measures agreed to in Paragraph XV below, in full and complete settlement of any and all claims of noncompliance, through execution of this document, as set forth in this agreement. After an examination of the "nine factors" pursuant to Louisiana Revised Statutes 30:2025(E)(3), the Department has determined that considering the significant costs and environmental benefits of the BEPs, the BEPs and cash payment should be accepted as a full and complete settlement of the claims set forth herein.

# XIV.

The Department agrees that it will authorize the development of the following BEPs pursuant to this settlement agreement and the authority of LAC 33:I.2501, 2503 and 2505 within a time period sufficient to allow Respondent to meet the schedule set forth below:

A. Respondent proposes a project aimed at reduction of emissions from its Cumene Storage Tank, emission point number 42-70 located in the Phenol/Acetone Plant. This project will consist of

installation of emission control technology aimed at reducing emissions by approximately ninetyfive (95%) percent or by 6.4 tons/year. Emission's from the cumene storage tank have averaged approximately 7.4 tons/year. However, because the efficiency of control technology previously installed to control emissions from the cumene storage tank was incorrectly estimated by Respondent in the application for the 1979 state permit to be approximately sixty (60%) percent, the amount being credited to Respondent by the Department for this project is 4.8 tons/year based on the 1979 state permit limit of 5.8 tons/year and the anticipated reduction of emissions to approximately 1 ton/year. This amount is based on recognition that the actual control efficiency of the previously installed technology is approximately twenty-five (25%) percent. As part of this project, Respondent proposes to install and use, among other things, a catalytic thermal oxidation system and piping/fuel system. Within thirty (30) days of the effective date of this Agreement, Respondent shall submit to the Department the authorization to construct request, as per LAC 33:III.511, necessary for implementation of the Cumene Storage Tank Project. After the Department's decision approving the authorization to construct request becomes final, Respondent will have one year to complete the Cumene Storage Tank Project. Respondent shall incorporate resulting projected emissions reductions and increased control efficiency into its next permit modification application that shall be submitted to the Department no later that one hundred and eighty (180) days after commencement of operation of the Cumene Storage Tank-Project and these emissions reductions shall not be used as offsets or netting for future emissions increases. Respondent's cost for completing this project is estimated to be approximately Seven Hundred Thousand and no/100 Dollars (\$700,000.00). Respondent proposes to complete this project within fifteen (15) months of the effective date of this Agreement.

- B. Respondent will contribute One Hundred Fifty Thousand and no/100 Dollars (\$150,000.00) to the City of Plaquemine for the development of the Waterfront Park located adjacent to the Plaquemine Locks, payable in three equal installments, of Fifty Thousand and no/100 Dollars (\$50,000.00), with the first payment being due before the expiration of the first full quarter following the effective date of this Agreement, the second payment being due before the anniversary of the first payment due date, and the third payment being due before the expiration of the second anniversary of the first payment due date. These funds will be specifically earmarked for funding of environmental enhancement and environmental educational projects, including introduction, planting and maintenance of trees and shrubs; promoting the flow and use of natural waterways, such as Plaquemine Bayou; construction and maintenance of exhibits explaining the importance of Louisiana's freshwater wetlands, flora and fauna; and recycling or other natural beautification activities.
- C. Respondent will make payment of cash in the amount of Four Hundred Thousand and no/100 Dollars (\$400,000.00), of this amount \$6,500.00 are enforcement costs to the Department. The payment amount shall be payable in (4) quarterly installments of One Hundred Thousand and no/100 Dollars each, installments being due and payable to the Department by the following dates:
  - 1. January 15 for calendar quarter October 1 through December 31;
  - 2. April 15 for calendar quarter January 1 through March 31;
  - 3. July 15 for calendar quarter April 1 through June 30;

- 4. October 15 for calendar quarter July 1 through September 30.
- The first installment shall be due by the first corresponding calendar date following the effective date of this Agreement, and the remaining installments being due on each corresponding quarterly date thereafter. If payment is not received within that time period, this Agreement is voidable at the option of the Department. Penalties are to be made payable to the Department of Environmental Quality and mailed to the attention of Darryl Serio, Office of Management and Finance, Department of Environmental Quality, Post Office Box 82231, Baton Rouge, Louisiana, 70884-2231.
- D. Within 180 days of the effective date of this Agreement, Respondent will make contributions and/or donations totaling One Hundred Twenty-Five Thousand and no/100 Dollars (\$125,000.00), as follows:
  - 1. A contribution in the amount of the Twenty Thousand and no/100 Dollars (\$20,000.00) will be made by Respondent to the Baton Rouge Area Mutual Aid System (BRAMAS), whose purpose is to develop, maintain and improve procedures for mutual assistance and cooperation in the control of emergencies and disasters, such as fires, spills, explosions, and releases of toxic substances, for the funding of hazardous materials training in areas including Iberville Parish;
  - 2. Purchase of equipment worth \$30,000 and donated by Respondent to the Louisiana State Police to assist response to hazardous spills and emergencies. The purchase of this equipment shall be coordinated through the Louisiana State Police Hazardous Materials Unit. The equipment specifications are attached hereto as Addendum B. The equipment specifications may be modified at the sole discretion of the LDEQ, providing, however, that

the total amount of this BEP shall not exceed \$30,000.00; and further providing that the LDEQ will notify Respondent of any modifications to the specifications within thirty (30) days of the date this Agreement becomes final.

- 3. A contribution in the amount of Thirty-Six Thousand and no/100 Dollars (\$36,000.00) will be made by Respondent to Baton Rouge Green for the funding of environmental projects, including educational and nursery programs;
- 4. A contribution in the amount of Thirty-Nine Thousand and no/100 Dollars (\$39,000.00) will be made by Respondent to Friends of Hilltop Arboretum, Inc. for the construction of its proposed nature trail and to fund environmental educational projects.
- E. The effective date of this Agreement shall be upon notice to the Respondent of the Secretary's signature.

## XV.

Respondent hereby agrees to undertake, and the Department agrees to accept, the following actions and schedule for compliance:

- A. Respondent will take any and all steps necessary to meet and maintain compliance with LPDES permit LA0007129.
- B. Respondent will also comply with the following: after August 31, 2002, Respondent shall comply with the effluent limitation of Total Chromium at Outfall 102 as contained in LPDES permit LA0007129, or cease operation of the Sodium Chlorate Plant and cease discharges from the Sodium Chlorate Plant except for discharges associated with the shutdown and clean up of the plant which shall be subject to the reporting requirements set forth in COMPLIANCE ORDER NO. WE-C-99-0014 and which shall cease by November 30, 2002.

- C. Respondent will submit quarterly progress reports to the Enforcement Division of the Department and shall include a description of the project, tasks completed, tasks-remaining, the percentage completed, and money expended on each project through the date of the report. Upon completion of all projects required under this Settlement, Respondent shall submit a final report to include a summary of all the information previously submitted and a total amount spent on the projects listed above. It shall also contain a certification that the projects were completed as described.
- D. Respondent will continue to implement measures to correct any problems discovered with the LDAR program in place at its Plaquemine facility.
- E. Respondent has submitted to the Department applications to modify existing Title V permits and has submitted revisions to pending Title V permit applications covering its entire facility. These revisions to pending Title V applications and applications for modification of existing Title V permits are identified in Addendum A to this Agreement. The emission limits requested in the submissions identified in Addendum A to this Agreement are intended to reconcile permit limits with actual emissions based on current knowledge of existing operations. Respondent shall, until a final decision by the Department on the revised Title V applications as well the applications for modification of existing Title V permits, comply with the emission limits contained in said applications. As the decisions or orders of the Department addressing each application become final, pursuant to La. R.S. 30:2024, Respondent shall comply with the limitations established in the permit or modified permit.
- F. If, for any reason, any or all the BEPs are disallowed, Respondent shall propose additional projects for the Department's approval in an amount equal to any disallowed BEP(s).

G. This agreement shall be considered a final order of the secretary for all purposes, including, but not limited to, enforcement under La. R.S. 30:2025(G)(2), and Respondent hereby waives any right to administrative or judicial review of the terms of this agreement. Respondent expressly reserves, however, the right to administrative or judicial review of the actions of the Department acting upon, interpreting and/or applying the terms of this agreement.

#### XVI.

This settlement is being made in the interest of settling the state's claims and avoiding for both parties the expense and effort involved in litigation or an adjudicatory hearing. In agreeing to the compromise and settlement, the Department considered the factors for issuing civil penalties set forth in LSA- R.S. 30:2025(E) of the Act and the rules relating to beneficial environmental projects set forth in LAC 33:I, Chapter 25.

### XVII.

Respondent agrees that the Department may consider the reports submitted by the Respondent referred to above, as well as this Settlement Agreement for the sole purpose of determining compliance history in connection with any future enforcement or permitting action by the Department against Respondent, and in any such action the Respondent shall be estopped from objecting to the above referenced documents from being considered as proof of the violations alleged herein by the Department for the sole purpose of establishing Respondent's compliance history in any such permitting or enforcement action.

# XVIII.

Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in Iberville Parish, as well as a newspaper of general circulation in that parish. The advertisement, in form, wording, and size approved by the Department, announced the availability of this settlement for public view and comment and the opportunity for a public hearing. Respondent has submitted a proof of publication affidavit to the Department and, as of the date this Settlement is executed on behalf of the Department, more than forty-five (45) days have elapsed since publication of the notice.

# XIX.

Any person's signature below shall constitute an agreement by that person, or as agent for a principal, to be bound by the terms and conditions of this Agreement. Each signatory to this Agreement represents that he is authorized to bind the party he represents. This Agreement shall apply to and be binding upon the Respondent and the Department, their agents, successors and assigns and upon all persons, contractors, and consultants acting under or for either Respondent or the Department.

## XX.

In consideration of the above, any claims for penalties based on facts or circumstances set forth herein are hereby compromised and settled in accordance with the terms of this Settlement.

#### XXI.

This Agreement is effective upon the last date signed by either party to the Agreement. The last signatory shall promptly mail a signed copy to the other party after executing the Agreement.

WITNESSES:	RESPONDENT
	BY: _ *
	NAME:
*	TITLE:
THUS DONE AND SIGNED before	e me this, day of, 2002, in
	Notary Public
WITNESSES:	STATE OF LOUISIANA J. Dale Givens, Secretary Department of Environmental Quality
	BY: R. Bruce Hammatt, Assistant Secretary Office of Environmental Compliance
THUS DONE AND SIGNED before Rouge, Louisiana.	e me this day of, 2002, in Baton
Approved: N. Ruce Vamuso	Notary Public
R. Bruce Hammatt, Assistant Secretary	